

RADIATION DETECTION DEVICES**Abstract of the Disclosure**

Radiation detectors are disclosed that include at least one element (pixel). In
5 a pixel, a desired positional relationship between two "effecting" elements is
maintained regardless of changes in temperature or other prevailing variable. The
detectors can be "electrical capacitance" or "optical-readout" types. A pixel of the
electrical capacitance type includes two electrodes (reference electrode and response
10 electrode) that face each other and have a set gap therebetween. The electrodes are
attached to respective displaceable members (configured as thermal bimorphs)
having identical structures. A pixel of the optical readout type includes a half-mirror
and a reflector that face each other and have a set gap therebetween. The half-mirror
and reflector are attached to respective displaceable members. Radiation is absorbed
15 by a radiation absorber that transfers the heat to certain displaceable members that
bend to tilt accordingly. Other displaceable members are not heated and do not
bend. The displaceable members are formable simultaneously during respective
fabrication steps.